

Sensor = A device that senses the signal energy of another device so as to communicate the same to another device or location.

Symmetrical = The shape of an object of integrated entity which can be divided into two along some axis through the object or the integrated entity such that the two halves form mirror image of each other.

Transducer = A device that coverts one type of signal or energy into another.

While this invention has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications and combinations of the illustrative embodiments as well as other embodiments of the invention will be apparent to a person of average skill in the art upon reference to this description. It is therefore contemplated that the appended claim(s) cover any such modifications, embodiments as fall within the true scope of this invention.

The Inventor claims:

1. A continuous real time tire pressure monitoring and display system for a transport vehicle comprising:

- a) a piston mounted magnet in a cylinder mounted on the inside wall of each tire of said transport vehicle;**
- b) a permanent magnet mounted perpendicular to said piston mounted magnet and mounted inside each said tire of said transport vehicle;**
- c) a transducer mounted on each rim of each said tire of said transport vehicle; and**
- d) an electronics module mounted in said transport vehicle and connected to each said transducer by at least one electrical conductor.**

2. The continuous real time tire pressure monitoring and display system for a transport vehicle of claim 1 wherein said electronics module comprises a micro-controller and a display.

3. The continuous real time tire pressure monitoring and display system for a transport vehicle of claim 1 wherein said transport vehicle is an automobile and said electronics module is mounted in the passenger compartment.

4. The continuous real time tire pressure monitoring and display system for a transport vehicle of claim 1 wherein said transport vehicle is an aircraft and said electronics module is mounted in the cockpit.

5. A continuous real time tire pressure monitoring and display system for a motor vehicle comprising:

a) a sensor means mounted on each tire of said motor vehicle for measuring the pressure in a rotating tire and representing said information as a series of magnetic pulses;

b) a means of capturing the magnetic pulses by a transducer into a stream of digital pulses;

c) a means of converting said digital pulses into an air pressure value; and

d) a means of displaying said air pressure value.

6. The continuous real time tire pressure monitoring and display system for a motor vehicle of claim 5 wherein said sensor means comprises:

a) a piston mounted magnet in a cylinder mounted on the inside wall of each tire of said motor vehicle; and

b) a permanent magnet mounted perpendicular to said piston mounted magnet and mounted inside each said tire of said transport vehicle.

7. The continuous real time tire pressure monitoring and display system for a motor vehicle of claim 5 wherein said transducer is mounted on each rim of each said tire of said transport vehicle.

5 8. The continuous real time tire pressure monitoring and display system for a motor vehicle of claim 5 wherein said means of converting said digital pulses into an air pressure value comprises an electronics module mounted in said motor vehicle and is connected to each said transducer by at least one electrical conductor.

10 9. A process for making the tires of a transport vehicle safer comprising the steps of:

- a) mounting at least one magnet on the inside wall of each tire of said transport vehicle;
- b) mounting a sensor on the rim of each said tire of said transport vehicle;
- c) transducing the output of said sensor into electrical pulses;
- 15 d) communicating said pulses to an electronics module through at least one electrical conductor;
- e) computing tire pressure value as a function of said pulses; and
- f) displaying said tire pressure value for each said tire.

20 10. The process for making the tires of a transport vehicle safer of claim 9 wherein said electronics module comprises a micro-controller programmed to calculate said tire pressure value as a function of said pulses.